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From: Shore, Berry
Sent: Mon 3/21/2016 12:53:40 PM
Subject: Lead in Newark Schools Drinking Water and Related Drinking Water Clips

Lead found in Newark drinking water; children to be tested for poisoning

on March 21, 2016 at 7:35 AM

By The Associated Press

NEWARK, N.J. (AP) — New Jersey's largest school district began voluntary blood tests to check students for the presence of lead Thursday, a week after officials announced that elevated levels had been found in the drinking water.

The first testing concentrated on the Newark school district's youngest students and began at the early childhood center, which was among 30 schools that had elevated lead levels in their water. About 67 families had registered for testing, said schools spokeswoman Dreena Whitfield.

As many as 17,000 children will be checked for lead poisoning, and the district will unveil a plan for wider testing next week, Whitfield said. The district said it plans to begin testing every tap at every school, including charter schools, in consultation with the EPA starting Saturday

Lead is known to severely affect a child's development.

"Well, I just hope they can fix it, 'cause she has to go school here," said Dionne Bradshaw, a Newark mother whose 4-year-old daughter was tested. "And if it can't be fixed I will just have to put her in another school or home school her. Whatever is best for my daughter."

Officials urged calm and said they don't believe there are any serious health risks. They say the lead levels in some of Newark's schools don't compare to the crisis that has plagued Flint, Michigan.

WNYC in New York reported that the U.S. Environmental Protection Agency worked with Newark schools in 2003 after elevated lead levels were found.

The schools superintendent at the time, Marion Bolden, said they replaced the water fountains in almost every school, installed lead filters and sent letters home to parents.

Lead hasn't been found in the city's water supply. It likely leached into the schools' water through lead pipes or other building fixtures made of lead or lead solder.

F. Nana Ofosu-Amaah, executive director of the Newark schools' office of early childhood, said not all the 67 families had their kids tested on Thursday.

"Some of them started to call their pediatricians, and say 'You know I'll just wait and go to the pediatrician,'" she said.

Republican Gov. Chris Christie said Tuesday that his administration would work closely with Newark officials to help remedy the problem.

"I want to make sure everyone understands this is a situation we're concerned about, but it is not a crisis," Christie said. "But we don't want to let it become a crisis. So we're on top of it."

It's unclear how long Newark's children have been exposed to higher concentrations of lead. School officials had shut off the water at 30 buildings last week and are using bottled water for drinking and cooking.

In his State of the City address, Mayor Ras Baraka called for a permanent improvement to the city's infrastructure.

"Our students' health is in jeopardy. There is nothing wrong with Newark's water, but there is something wrong with our infrastructure. It is old," Baraka said. "We don't want to send our children bottled water for the next 20 years, and we don't just want filters on water-use sites."

Ex-Newark school officials 'don't recall' rejecting EPA offer to fight lead

By Bill Wichert

March 19, 2016 at 8:30 AM, updated March 19, 2016 at 9:07 AM

NJ Advance Media for NJ.com

NEWARK — As Newark school officials continue to address elevated lead levels in city schools, a spokesman for the federal Environmental Protection Agency said Friday school officials in 2003 rejected an offer to partner with the agency to address lead contamination in the district.

But school officials from that time period said they do not remember such an offer being made.

"I don't recall us saying we don't need the help of EPA," said Marion Bolden, who served as the superintendent of the Newark Public Schools from 1999 to 2008.

The district's response to lead contamination has come under scrutiny in the wake of findings that 30 city school buildings have recorded elevated lead levels. School officials are planning to test all district buildings in the coming weeks and testing has begun on students' blood lead levels.

The district has said it has been testing school buildings for lead and taking remedial actions for more than a decade.

Newark Parent Speaks Outside 2nd Testing Site

Sakina Banks, whose 4-year-old son was getting tested for lead in his blood Friday, said she was concerned about when the district first knew lead was in the water. (Laura Herzog / NJ Advance Media for NJ.com)

According to EPA spokesman John Martin, the federal agency conducted water testing in the district in 2003 and asked school officials about partnering with the EPA to implement the "3Ts lead in schools program" in Newark.

"While the EPA offered to help implement the 3Ts program, the Newark school district let the EPA know it already had a program in place, which included testing and providing filters in their schools," Martin said in an email.

But Steve Morlino, who served as the district's executive director of facilities between 1999 and 2013, said he did not recall federal officials offering to partner with the district and officials turning the agency down.

"If they had offered to partner with me, I would've taken them up on it in a heartbeat," Morlino said. "We would never turn down help like that, not while I was there."

Morlino said the agency conducted water testing in the district and recommended various remedial measures, including replacing water fountains and installing lead reduction water filters. He said school officials followed those recommendations and continued to regularly test the water in school buildings.

In addition to water testing, Morlino said school officials during his tenure replaced water fountains where high lead levels were discovered, installed filters throughout the district and followed flushing protocols to eliminate contaminants.

Newark schools' water trends: 4 ways lead levels changed

See what we learned from past test results the school district released Thursday night.

In response to EPA's claims, district spokeswoman Dreena Whitfield said school officials worked with EPA in the early 2000s, but the exact involvement of the agency was not clear.

"Past documentation and facilities staff have both articulated that the district worked in conjunction or in 'consultation' with the Federal EPA in the early 2000's," Whitfield said in a statement.

"It is not clear from our review what the exact involvement of the EPA was, but it appears that previous staff felt

comforted by their conversations that the protocols they were putting in place complied with federal guidance at the time," she added. "We continue to conduct a comprehensive review of all past practices in this area and continue to be committed to sharing whatever we find with the public."

NJ Advance Media Reporter Jessica Mazzola contributed to this story.

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Poisoned Water in Newark Schools

SundayReview | Editorial

By THE EDITORIAL BOARD

MARCH 19, 2016

Students on their way to the Early Childhood School in Newark on Thursday morning. Credit Bryan Anselm for The New York Times

Newark Public Schools recently acknowledged that the water at its schools has contained high levels of lead for years. This is shocking but, sadly, not surprising given the neglect of public schools, especially those in poor communities, by Congress and state governments.

Last week Newark officials began offering blood tests for elevated lead levels in students after tests showed that drinking water at 30 of the district's 67 schools exceeded the safety threshold established by the Environmental Protection Agency. But even levels below that standard — 15 parts per billion — are not acceptable. Public health experts say there is no safe amount of lead in water and that children exposed to the heavy metal can suffer irreversible damage to the neurological system.

The Newark district found high lead levels in water samples taken over the past four years and has promised to release the results from earlier years. District officials were aware of the hazard as early as 2004, and some steps, like installing water filters, were taken over the years.

There are striking parallels between Newark schools and the city of Flint, Mich., which is also struggling with a lead crisis. Both are distressed, both have a large minority population, and both are subject to state control — in the Newark school district's case, for more than 20 years. Gov. Chris Christie's administration needs to respond immediately, providing bottled water to the schools and figuring out how many children have been harmed.

The state should also investigate what previous superintendents did in response to elevated lead levels and why results from earlier tests were not made public. If the state is unable or unwilling to do that, federal officials should step in. Last week, federal court filings in New York City revealed that the United States attorney's office in Manhattan is investigating elevated blood lead levels in residents of the city's public housing and homeless shelters.

Lead in the water, which often comes from water lines and plumbing fixtures, has been a hazard in school districts around the country, including those of Washington, D.C.; Seattle; and Los Angeles. Baltimore's has used bottled water for drinking and cooking since 2007. Schools in Camden, N.J., have been on bottled water for 14 years.

Since most school buildings in cities are old, they tend to have plumbing with significant amounts of lead. It was not until 1986 that Congress set the maximum level of lead in pipes and fixtures at 8 percent, a standard unchanged until Congress lowered it to 0.25 percent starting in 2014.

Yet federal law does not require schools to test their water if they get it from a public water utility, which most schools do. This needs to change. Congress and state legislatures should pass laws requiring regular testing for lead and that the results are made public.

When contamination is detected, school districts will need money and expertise from federal and state agencies to fix the problem. It is absolutely unacceptable that public schools, very often in the poorest communities, may be poisoning their children.

Newark turned down EPA's 2003 offer to help lower lead levels, report says

By Jessica Mazzola | By Jessica Mazzola | NJ Advance Media for NJ.com

updated March 18, 2016 at 7:14 AM

NJ Advance Media for NJ.com

NEWARK — Elevated levels of lead have been present in the drinking water at Newark Public Schools for more than a decade, and according to a new report, the district previously refused federal help to deal with the issue.

According to a WNYC report, Environmental Protection Agency officials say the federal outfit worked with Newark to identify a lead issue in the schools buildings' drinking water back in 2003. When the EPA offered to help remediate the issue, the district refused, saying it already had a remediation program in place, the EPA told WNYC.

Current school district officials have been scrambling to find past test results in light of elevated lead levels that were revealed in 2015 tests. Thursday night, the district released results for the last three school years, which showed elevated levels dated back that far.

Marion Bolden, who led the district from 1999 to 2008, told WNYC the district aggressively addressed the issue at the time, via methods like water fountain replacement and faucet flushing. The district also conducted regular testing and alerted parents when levels were elevated, she said in the report.

School employees have alleged that filters have not been properly maintained. Thursday, the state released a document outlining new testing and remediation methods, saying they were necessary in light of "uncertainty" about past practices in the district.

The city began testing students' blood lead levels Thursday. Re-testing water lead levels at all of the district's 82 locations is set to begin Saturday.

Lead at Newark schools: What we know, and what we don't

By Jessica Mazzola

on March 19, 2016 at 10:00 AM, updated March 19, 2016 at 12:40 PM

NJ Advance Media for NJ.com

NEWARK — What started as a staff member noticing discolored water at the Louise A. Spencer Elementary School on March 3 has turned into what some are calling a water crisis for the largest school district in the state.

Gov. Chris Christie cautioned parents against panicking about the lead levels Friday. Still, thousands of kids in Newark may be tested for lead poisoning, half of the district's student body is relying on bottled drinking water while officials retest water samples and formulate a lead remediation plan, and past school, city, state, and federal officials are disagreeing about just how long Newark's kids have been exposed to lead at school.

Look-up: How much lead is in your school's water?

Look-up: How much lead is in your school's water?

See the percentage of samples that tested positive for high lead levels at your child's school over the past four years.

Below is a look at what we know, and what questions still remain, about the elevated levels of lead found in the drinking water at Newark school buildings.

HOW WE FOUND OUT

On Wednesday, March 9 – a week after a staff member reported discolored water – school district officials and the state Department of Environmental Protection announced the results of annual testing revealed lead amounts at 30 school buildings were higher than the "action level," at which the federal Environmental Protection Agency advises retesting and remediation take place. The district immediately announced it was turning off water taps that had tested above the 15 ppb

limit, and importing bottled water to be used for drinking and cooking at those schools for the foreseeable future.

Though Chris Cerf, the superintendent of the 35,000-student, state-controlled school district, has said that he finds the elevated levels "extremely concerning," he and other officials have cautioned residents from comparing the levels found in Newark to those found in Flint, Michigan.

WHAT WE KNOW

- Newark officials say the lead is not originating in the city's water supply, but instead from aging pipes and other infrastructure inside the old school buildings. The highest water sample recorded in Newark in 2015 was 558 ppb. The highest water sample that has been recorded in the district in the past four school years was 2,290 ppb. By comparison, Flint has garnered national attention for contaminated city drinking water that reportedly tested as high as 13,200 ppb.
- While local officials are working with the NJDEP and EPA on a new water re-sampling and remediation plan, the EPA has said that it reached out to the district when elevated lead levels were found in its drinking water in 2003. The district opted for its own remediation plan, and refused federal help, the EPA has said. But, Newark officials who worked in the district at the time denied that.
- This week, district officials released test results from samples taken at Newark schools over the past four school years. Sixty-two percent of schools showed elevated lead levels last school year. That dropped to 43 percent this year.
- Health experts have said it is unlikely that the lead levels recorded in Newark schools would cause serious health complications. But, the city began this week testing thousands of kids who attend the affected schools.

WHAT WE DON'T KNOW

- What exactly has been done? Newark teachers union members have accused district leaders of failing to adhere to remediation procedures that have been in place since at least 2004. District officials say they are continuing to investigate what procedures have actually been followed.
- Who will be on the hook to fix the problem? Whether the district opts to replace piping, add filtration systems, or continue serving kids bottled water, the bill to deal with the issue is going to be hefty. Though the city has stepped in to provide water bottles and free blood testing to residents, Mayor Ras Baraka said Friday he plans to ask for assistance to cover the cost. "It's not fair. (The state) runs the system, and we deal with the fallout," he said.
- How far reaching is the problem? Newark schools are far from the only old buildings still in operation in the state. Environmental leaders have said this issue, and a similar one in Jersey City schools in 2013, point to a larger problem that exists throughout the state. Some other school districts have started testing their water in response. Local leaders in Newark have called for the state to invest in an overhaul of its infrastructure.

Lead fears grow in Newark schools, but problem isn't new

by Ben Finley,

6:32 p.m. EDT March 18, 2016

Associated Press

TRENTON - In New Jersey's biggest city, fears are growing over lead in the school district's water after a lab found elevated levels in nearly half its schools. The Newark district quickly shut off sinks and fountains in 30 buildings and has offered to test as many as 17,000 kids for contamination.

But the problem isn't new for the state's largest school district. Testing has shown elevated levels in some buildings over the last few years. And the district has been addressing issues of lead in the water since at least 2003.

The highest lead levels found in the water in Newark's schools, however, are far lower than those found in homes in Flint, Michigan, which is experiencing a crisis after the city changed its water supply.

Water also poses a relatively small risk of lead poisoning compared to more common sources, such as lead paint.

"One square centimeter of lead paint, about the size of your pinkie nail, has two times what you'd get from drinking a quart of water from highest level of lead in one the schools," said Dr. Steven Marcus, executive director of the New Jersey Poison Information & Education System at Rutgers University.

Nevertheless, parents are concerned, with dozens submitting their kids for blood tests when the district first offered them on Thursday.

"My first thing was, Flint, Michigan," said Dionne Bradshaw, whose daughter was tested. "That's the first thing I thought about. Ok, here we go again."

Here are some questions and answers on the situation:

HOW LONG HAS NEWARK KNOWN ABOUT LEAD IN THE WATER?

The district has been tackling the issue of lead coming from water sources, such as old sinks, in some schools since at least 2003, according to the federal Environmental Protection Agency.

John Martin, an EPA spokesman, said the agency found elevated levels in two of Newark's schools that year. It offered the district help in addressing the problem. But he said Newark turned down the offer because it had its own lead remediation program in place.

Newark schools superintendent Christopher Cerf recently acknowledged that the district has been addressing issues of lead in water sources for more than a decade. For instance, the district had been replacing faucets and adding filters after taps showed higher levels of the toxin.

The district has only started to release test results to the public. But in each year since 2012, an outside laboratory has found elevated levels in the taps of some school buildings. For instance, 15 percent of the water samples taken during the 2014-15 school year showed amounts of lead that require action from school officials.

WHAT IS THE SCHOOL SYSTEM DOING TO ADDRESS THE PROBLEM?

Newark is working with the state Department of Environmental Protection as well as the EPA to tackle the issue. Efforts include testing every tap at every school. The district is also offering blood tests to as many as 17,000 kids who were potentially exposed.

In a press release, superintendent Cerf said last week's test results prompted him to take action.

"By the time school opened Wednesday morning, we were shutting off all water fountains and other affected sites at any school that had received a positive reading," Cerf said.

But Newark's teachers union has criticized the state-controlled district for not taking such action in previous years. And Elise Pivnick, director of environmental health for Isles, a New Jersey-based environmental community group, added, "It's really an old problem. There's nothing new here. That water hasn't changed in the last three years."

HOW MUCH OF A PUBLIC THREAT IS LEAD CONTAMINATION IN NEWARK SCHOOLS?

The district says that the highest readings of lead were found in water sources not typically used for drinking and food preparation, such as a utility sink.

But looking at the big picture, paint — not water — should remain the biggest concern when it comes to lead poisoning, according to Dr. Marcus of Rutgers' poison center. He added that other items, such as the Mexican candy Tama Roca and a south Asian eyeliner known as Khol, have far higher levels of lead.

"We had 18 children in about the last year or year and a half who were hospitalized and treated for lead poisoning," he said. "The primary source was not water."

What will be done about lead-laced water in Jersey City schools?

Letters To The Editor

March 19, 20016

The Jersey Journal

It is unfortunate that on top of the lead problem in the drinking water at some of the public schools in Jersey City, we now have birds nesting inside Snyder. Lead in the Jersey City schools was first discovered several years ago. To date nothing else has been done except to shut off the water fountains in the schools and deliver bottled water to the buildings. What is the next step to resolve this problem?

Since the news about the city of Flint, Michigan, hit the airwaves, all eyes and ears have been attuned to that area of the country. Recently, news of contaminated water found in several schools in Newark has surfaced.

But, Jersey City's contaminated water issue has received little to no attention by the State of New Jersey or the city administration. How can water be contaminated inside school buildings and not in homes, public housing complexes, churches, businesses, etc.?

The state took control of Jersey City public schools over 25 years ago! Snyder High School was cited as a failing school. It is astonishing to me that little to no remediation has taken place in Snyder by the state educational team staff except to add another school within its confines.

News was released late last year that the State of New Jersey will be returning Jersey City public schools back to local control. It was encouraging to hear at the March 17th Board of Education meeting that an ad hoc committee has been set up to discuss the return to local control. This ad hoc committee consists of members of the JC Board Of Education and the JC City Council. This is a start.

However, I am suggesting minutes from the meetings of this ad hoc committee be made public, or the meetings be held in public and aired on the public television station for public viewing. Return to local control will be a very complex matter. Homeowners and tax payers of the city need to be kept informed on how local control of its public schools will operate minus the alleged state funding that came with state control.

For instance, will Jersey City residents be responsible financially for the clean up of the hazmat issue at Snyder High School, and the lead in the water issue at the public schools which incidentally was ignored while under state control?

What about the co-location program (school within a school) now existing at Snyder High School ... will the expense of expanding this separate program into a larger student population be passed on to the city? What about the proposed expansion of the co-location program to the other Jersey City high schools and the costs involved?

Currently the student population at SHS and the Innovation Program combined will surely exceed the approved capacity within that one building as additional grades 11 - 12 are added. Who will fund the additional staff that will be required to operate these programs if they become official high schools?

A new principal for the Innovation Program was introduced at the March 17th meeting of the JCBOE. Will the other Jersey City high schools also have separate principals in their co-located school? Who will pay for this additional staff after local control has been accomplished? Why is the advanced curriculum offered at the co-located site not being provided to the entire Snyder High School student body?

Instead it is offered to an additional set of students from across the city now physically located inside the one facility on Bergen Avenue? Why not offer the advanced curriculum to all existing high schools in Jersey City in lieu of creating additional high schools or separate programs? Capacity in our local school buildings is shrinking in Jersey City since the current administration is on a building frenzy to make Jersey City the largest city in the state and construction of new housing projects are sprouting up like weeds.

Bret Schundler, former mayor of Jersey City, predicted a shortage of 7,000 seats in our public schools. I believe it is crisis time in this city and very little opportunity for public scrutiny has been provided.

I question whether state control of the Jersey City public schools improved anything. We need transparency in the transfer to local control and rational thinking on how local control will operate.

JOAN TERRELL PAIGE
JERSEY CITY

There's Now a Lead Crisis in Newark Too

By Ben Mathis-Lilley

March 18, 2016

Slate

As congressional hearings and recriminations related to the Flint water crisis continue, state and local officials say that children in Newark, New Jersey, public schools may have been exposed to potentially harmful levels of lead in tap water.

The numbers involved are a little convoluted, but here's what's going on:

- The EPA requires water providers to take action to reduce the amount of lead in tap water if more than 10 percent of samples are found to have lead levels of 15 parts per billion or higher.
- According to the Wall Street Journal, out of 2,732 Newark-school water-quality samples collected between the 2012 and 2015 school years, 11 percent had lead levels above 15 ppb.
- At least one sample tested above 15 ppb in 30 of the district's 60-plus school buildings.

In Flint, by comparison, one study found levels of lead above 15 ppb in 16 percent of tested samples after the city switched to a corrosive water source that caused lead plumbing materials to leach into drinking water. (Leaching from outdated plumbing materials is what's believed to have happened in Newark's schools as well.) A Flint hospital study conducted at about the same time found that rates of children with elevated blood lead levels had doubled.

Drinking fountains and faucets have been shut off and replaced with water coolers and bottled water at the 30 schools where samples above 15 ppb were recorded; the city is also making free tests available to parents who want to find out if there are potentially harmful levels of lead in their children's blood. (Lead exposure in young children has been found to be associated with reductions in IQ and attention-deficit problems.)

Meanwhile, in New York City, federal prosecutors disclosed that they are investigating whether conditions in public housing buildings and homeless shelters exposed residents to dangerous levels of lead. (Humans can be exposed to lead via a number of sources including paint and dirt as well as water; the New York investigation is not strictly water-related.)

Ben Mathis-Lilley edits the Slate. Follow @Slate on Twitter.

Water tests miss problem pipes

03/18/2016

Ithaca Journal, The

"It's a state responsibility to make sure all New Yorkers have clean water to drink..."

Assemblywoman Barbaba Lifton, D-Ithaca

Ithaca pediatrician Marguerite Uphoff remembers a time when leaded gasoline burned inside cars, lead-based paint covered bedroom walls, and school districts installed pipes with lead solder to deliver drinking water for children.

"There's no question that lead is a neurotoxin, and even at low blood-lead levels, it has the potential to affect development, behavior and learning ability," she said.

In 2016, motors run on unleaded gas, and the lead-based paint can be easily detected and removed. Lead pipes and lead solder, however, are more expensive to replace and often harder to find. While some regulations exist to protect people

from lead in drinking water, recent tests at local schools reveal a gap in the rules designed to protect children.

Drinking fountains, classroom faucets or cafeteria tap water have been contaminated by lead, generally in the pipes or fixtures in districts across the region, but many schools found out only after community concerns led to testing. Why? Schools on municipal water systems aren't required to test the water the way those on well water or other non-municipal systems are.

"We know what we need to do, and that's trying to figure out how to get the lead out of the water," Uphoff said.

Because municipal water systems are required to test their water, the state Department of Health and U.S. Environmental Protection Agency don't require districts to also test. But both agencies also point out that lead contamination in a school's water typically comes from the building's plumbing, which wouldn't show up in system testing.

Drinking water typically isn't contaminated with lead when it leaves the treatment plant. The toxic metal leaches out when water contacts lead pipes and lead solder, according to the state health department and EPA. That was how Flint, Michigan, ended up with so many problems: The city failed to treat the water with anti-corrosives, which meant even more lead leached out of the pipes and solder than typical.

At least two state legislators in the region want to close that gap.

New regulations sought

State Assemblywoman Donna Lupardo, D-Endwell, said she was surprised to learn that schools using municipal water aren't already required to test for lead.

"The fact that someone saw fit to end the use of lead piping and lead solder in schools after (1986) obviously indicated that there was a concern for lead in water," Lupardo said.

She has proposed legislation requiring drinking water testing at all New York state schools. On Tuesday, the assemblywoman was seeking cosponsors and a state Senate sponsor. .

Assemblywoman Barbaba Lifton, D-Ithaca, said she has two grandchildren in the Ithaca City School District - elevated lead levels have been identified in each of the district's 12 schools.

"I share the concern of my constituents," she said. "I'm trying to find out what the appropriate state role in this - in terms of new state law, perhaps, and a stronger state role in terms of making sure local municipalities, school districts and perhaps other entities are tracking this issue."

On Thursday, Lifton announced she was introducing legislation requiring each water district to test for lead in all the schools and day care sites it serves, and that parents would receive written notification if the lead levels are above 15 parts per billion.

"There are children in (buildings) other than schools, and we need to consider the health of all our children," she said. It's a state responsibility to make sure all New Yorkers have clean water to drink, and it's the state's responsibility to pay for such testing and necessary remediation, she added.

"There are different approaches to legislation," Lupardo said. "My bill directs the state education department, in consultation with the department of health, to come up with an approach that works for everyone." Lupardo added that she would look to federal or state resources if testing is cost-prohibitive for schools.

U.S. Sen Charles Schumer, D-N.Y., also weighed in on lead testing in state schools. Schumer announced last week he would seek to create a \$100 million federal grant program through the EPA to help school districts across the country test their drinking water for potential lead contamination.

Schools are strapped for cash and don't need an unfunded mandate on testing water for lead, Schumer said. The first step is getting money for schools to identify lead problems in drinking water, and there are no plans at this point to require water

testing at schools that use municipal water, he added.

"We don't want to have an unfunded mandate, so once the money is here, that's a step we would consider, but right now, we want to get this bill passed first," he said.

Existing regulations

Regulatory oversight is playing out at schools in the Ithaca, Binghamton and Elmira areas, and throughout the country.

School district officials plugged water sources after voluntary lead testing showed unsafe lead concentrations at 10 Ithaca City School District buildings, two buildings in the Trumansburg Central School District, and four Binghamton City School District buildings.

After the lead contamination was reported, nearby school districts, including Corning-Painted Post School District and other districts in the Elmira region, committed to test their water for lead.

Though they agreed to an off-the-record interview with Gannett Central New York Media Group, state health department officials were unwilling to comment on the record beyond this statement:

"Department of Health does not have legal jurisdiction over interior water fixtures in school buildings," agency spokesman James Plastiras said in an email. "The issue of lead contamination in older infrastructure has been around for decades, and school districts have the responsibility to fix issues related to lead in drinking water in their buildings."

Along with no state mandates, there is no federal law requiring drinking water testing in schools and child care facilities, except for those that have their own water supply, according to EPA spokesman John Martin.

"The primary business of schools is education, and not operating and maintaining a public water system," Martin said in an email. The EPA and states are working together to look at practices or equipment, which could be causing increases in lead, he added.

No EPA officials were available for telephone interviews, Martin said.

Danger at home

Along with potentially unidentified lead levels in drinking water at schools, municipal water in homes can be contaminated.

Elmira Water Board General Manager Mark D. LaDouce still remembers the day he pulled a water pipe with lead "wiped joints" from the wall inside his home.

"That's a pretty good exposure there, and if you don't have any reason to tear a wall out and look at it, you wouldn't be certain that it's not there," he said. "It's poison; that's the problem."

Lead wiping was a common way to join pipes until the dangers of lead were identified, and plumbers used lead pipes because they had a long service life, LaDouce said.

There are 481 lead service pipes still in use at single-family homes in the City of Ithaca water system, according to Ithaca Department of Public Works Assistant Superintendent Erik Whitney. And of the city's 5,277 service connections, 1,103 haven't been inspected for lead pipes or lead solder, he added.

The Elmira Water Board has about 1,400 service lines that are lead, out of about 18,000 service connections, LaDouce said.

The service lines are typically replaced when streets are repaved, and the water system replaces about 70 lead service connections each year, according to LaDouce.

"In the guidelines for lead testing, we are forced to sample (water) from 30 single-family houses that have lead services

with plumbing that predated 1986," Whitney added.

All water systems across the country have to replace 7 percent of their known lead service lines annually if lead concentrations test too high at the customer taps, according to Chemung County Health Department Senior Environmental Health Specialist Lindsey Brown.

"I think there's been enough attention drawn to this that we will develop the social will to make (replacement of all lead service lines) happen," Brown said.

The City of Ithaca and Bolton Point municipal water systems in Tompkins County and the Binghamton Water Department reported that their lead levels are within allowed limits.

The Elmira Water Board also was required to report lead sampling for 30 customer faucets in its water quality reports. There were no lead exceedances in the system, according to the board's 2015 Drinking Water Quality Report.

The municipal systems treat their water to not be corrosive to lead pipes, but LaDouce still suggested that people with homes built before 1987 get their water tested for lead.

"You might have to make a search (for lead in your plumbing) after that if there's an elevated level," he said. "It's not something to mess with; lead is bad stuff."

Buildings constructed before 1986 are more likely to have lead pipes, fixtures and solder, according to the EPA. Lead solder and fixtures were banned nationwide in 1986. Before the SDWA Lead Ban took effect in June 1986, solders used to join water pipes typically contained about 50 percent lead.

Mitigating risk

Historically, paint and leaded gasoline have been far greater lead sources than water, and blood lead levels in children have steadily decreased, according to Uphoff, the Ithaca pediatrician.

In the 1970s, it wasn't uncommon for pediatricians to see lead poisoning cases where children had blood lead levels greater than or equal to 45 micrograms per deciliter, according to the UCLA Institute of the Environment and Sustainability.

Experts now use a reference level of 5 micrograms per deciliter to identify children younger than 6 years old with high blood lead levels, according to the Centers for Disease Control and Prevention. The CDC reports that children with blood lead levels above 5 micrograms per deciliter are in the top 97 percentile of children when tested for lead in their blood.

No safe blood lead level in children has been identified, according to the CDC website.

"As lead levels have come down, the lead in water becomes more important because we've been reducing other sources consciously, although we still have a lot of (sources) in the community," Uphoff said.

The state health department recommends letting water run for 15 to 30 seconds before drinking, and let water get cold.

Binghamton University pediatric nurse practitioner Susan Terwilliger recommended that parents make sure homes are lead free, and feed children foods that are rich in calcium and iron. The two nutrients block lead absorption into the body, she said.

"Our kids, if they have a problem with lead, it's usually from lead paint in older homes," Terwilliger said.

Dirt even can contain lead paint chips, Terwilliger added. Have children wash their hands before eating, she said.

"The CDC really recommends that you have sandboxes for kids, and don't let them play in the dirt anymore, and that just seems so natural, to play in dirt," she said.

Children 6 years old and younger are most susceptible to the effects of lead, which can affect almost every organ and

system in a person's body, according to the EPA.

Programs such as Tompkins County Health Department's Healthy Neighborhoods Program seek to identify lead poisoning and mitigate other common health risks, Uphoff said.

Children absorb lead more readily than adults and excrete it more slowly, Uphoff added.

Lead poisoning damages growing cells and tissues, and it can cause behavior and learning problems, lower IQ, slowed growth, hearing problems and anemia.

"Lead is not good; lead is a neurotoxin, and it doesn't do good things for development," Uphoff said. "Children who ingest significant quantities of lead are at risk for developmental problems."

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See a video on how lead gets into your drinking water, with this report at [ithacajournal.com](#)

"It's a state responsibility to make sure all New Yorkers have clean water to drink..."

Assemblywoman Barbaba Lifton, D-Ithaca

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A legal loophole might be exposing children to lead in the nation's schools

By Emma Brown |

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Washington Post

Children drinking from water fountains at the nation's schools -- especially in aging facilities with lead pipes and fixtures -- might be unwittingly exposing themselves to high levels of lead, which is known to cause brain damage and developmental problems including impulsive behavior, poor language skills and trouble remembering new information.

Under federal law, the vast majority of schools don't have to test the water flowing out of their taps and drinking fountains, and many states and districts also do not mandate water testing at schools. Even when districts do test their water, they don't always tell parents about the problems they find.

This is not a hypothetical issue, nor a new one. Acute lead contamination has been found in school water in many cities during the past 15 years, including Los Angeles, Seattle, Baltimore and the District of Columbia.

But the problem of undetected lead in school water is receiving new attention in the aftermath of the crisis in Flint, Mich., where a switch in drinking water sources left children exposed to high levels of lead for months, both at home and at school.

"Right now there is a yawning gap in our lead-testing protocols," Sen. Charles E. Schumer, D-N.Y., said in a statement last week when he introduced legislation that would provide \$100 million in grants to help schools test drinking water for lead. "It's disturbing that Flint may have been just the tip of the iceberg when it comes to toxic lead in our kids' drinking water."

Schumer was motivated in part by the discovery of lead contamination in schools in Ithaca, N.Y., where officials began providing bottled water to students last month after finding high lead levels in two buildings, including one classroom sink with lead levels of 5,000 parts per billion -- hundreds of times higher than the level at which the federal government requires action.

Ithaca's findings spurred officials in nearby Binghamton to reexamine test results from 2013; they found more than 50 taps with elevated lead in their public schools, including seven taps used for drinking water. And last week, elevated lead levels prompted New Jersey officials to shut off water fountains at nearly half the schools in Newark Public Schools, the state's largest school system.

Officials said Tuesday that they will test 17,000 Newark children for lead exposure, starting with 2,000 toddlers who attend preschools and day care centers. They also acknowledged that Newark school leaders have been aware of the risk of high lead levels for more than a decade, and have managed the risk in part by directing custodians to flush water fountains daily.

Virginia Tech engineering professor Marc Edwards, who played a key role in bringing to light the crisis in Flint, said he believes the vast majority of the nation's schools are not testing the water flowing out of their taps.

"I'm really much more concerned about the schools you do not hear anything about, and that have not tested, than I am about schools that have tested," Edwards said.

"When people do the testing and they hear about the high lead, of course they're rightly very worried. But everyone has to recognize that's the good news: An adult did the sampling and protected kids going forward, thank goodness," Edwards said. "As we've seen with Flint when it comes to lead what's done cannot be undone, and we really need to get out there and do the testing so that future harm does not occur."

The Government Accountability Office found in 2006 that "few schools and child care facilities have tested their water for lead."

"In addition, no focal point exists at either the national or state level to collect and analyze test results," the GAO wrote. "Thus, the pervasiveness of lead contamination in the drinking water at schools and child care facilities -- and the need for more concerted action -- is unclear."

Schools that provide their own water via wells must test their own water every three years under federal law. That's how the problem in Ithaca was uncovered, but parents weren't told about the elevated lead until February, six months after the tests were conducted.

"I flipped out," said Melissa Hoffman, the mother of a kindergartner and a fourth-grader at Caroline Elementary, where classrooms were found to have taps dispensing water with high lead levels. "I just assumed it would be safe."

Hoffman said she refuses to live in fear for her children. "The damage is done. I just have to move forward with them and continue to support them in healthy ways, and feed them healthy foods, and do the best I can by them," she said. But she's angry, and feels that the school system's approach to drinking water quality indicates a lack of seriousness about children's health and safety.

But schools like Hoffman's, where testing is required, account for just 8 to 11 percent of all schools.

The rest of the nation's schools -- about 90 percent -- get their tap water from municipal sources that must be tested for lead under federal law. The testing happens at the water treatment plant, before the water courses through miles of plumbing and fixtures.

If those pipes and fixtures contain lead -- and they often do, as lead-based pipes weren't outlawed until 1986 -- then water can become contaminated on the journey to the tap. If the water isn't tested regularly as it comes out of the tap, there is no way to know if it is truly safe.

Edwards said that the water in a school is often more likely to be contaminated than the water in a home because schools close for long periods, leaving water sitting in the pipes. The stagnant water creates chemical and bacterial conditions that can intensify the lead problem, he said.

He said he'd like to see more schools testing their taps because it's the right thing to do in order to protect vulnerable children, and he said he wishes the Environmental Protection Agency and Centers for Disease Control were more aggressive about pushing schools to initiate voluntary testing programs.

But even testing is no guarantee of safety, he emphasized: Lead solder in the plumbing can break off into the water, contaminating water so acutely that it measures at hazardous waste levels. But that occurs randomly and is difficult to

capture in standard testing protocols.

"You'll have these taps that I call Russian roulette taps. This is your worst nightmare," Edwards said. "We've seen schools where drinking a single glass of water has the same lead exposure as eating five to 10 lead paint chips."

Many school districts -- such as Newark -- have attempted to manage the risk of lead contamination by advising custodians to flush water fountains and other taps every day for a minute or two, or longer. Edwards said that approach can be helpful in the short term but has never been proven effective over the long term, in part because school staff often don't flush as often or as regularly as they are supposed to.

"They're always talking about how you have to run the water, run the water - but there's nobody to run the water," said Greg Goodrich, the parent of two children at Ithaca's Enfield Elementary, where testing turned up high lead levels. "If you're the first kid in the morning to drink out of the drinking fountain, you're getting the largest dose."

At schools built before 1986, Edwards said he would advise concerned parents to advocate for installing lead filters on water fountains and taps that children use to fill water bottles. Such filters are effective at protecting water quality, Edwards said, and offer more peace of mind than testing ever could.

Schools built between 1986 and 2014 are not entirely in the clear, carrying at least some risk of lead contamination in water because until 2014, brass fixtures were allowed to contain some lead. For schools from this time period, Edwards advises parents to advocate for a regular testing program to ensure that the water is safe.

Many states recognize that it's important to ensure safe drinking water at school, but local authorities say they don't have the resources for broad school-water testing programs, according to the EPA. "In the absence of additional federal funding," the EPA wrote in a 2004 report, "it would be difficult to expand programs beyond existing efforts because state drinking water programs are already challenged by funding shortfalls."

Edwards also played a central role in revealing exceedingly high lead levels in Washington, D.C.'s municipal water source in 2003 and 2004, and later in its public schools. He discovered through a Freedom of Information Act request that in one school, the water flowing out of one tap had more than 7,500 parts per billion of lead; the EPA calls for action when lead levels in schools are at or above 20 parts per billion in a 250-milliliter bottle.

The District of Columbia's school system now posts the results of regular water testing online.

The results of D.C.'s recent tests show the importance of regular testing: Even years after installing filters on every tap to help resolve the lead problem in D.C., schools officials are still finding some school water fountains and taps with high levels.

Testing in December, for example, found two taps at the District's Leckie Elementary with elevated lead, and both were turned off until filters could be installed. One tap, inside a classroom, had a lead level of 68 parts per billion; the other, in the basement, was 54 parts per billion.

In other cities that have faced lead crises in their public schools, it has often been parents who have raised concerns and pushed for change.

That was the case in Baltimore, where school officials knew of lead contamination in school water fountains in the early 1990s. A decade later, in 2003, James Williams Sr. -- the father of a child who had been poisoned by lead paint -- raised an alarm.

Williams told the city school board that he had visited a dozen schools where he saw children drinking from fountains that had been found to have elevated lead levels years earlier.

Williams' report forced officials to address the lead problem, introducing regular water testing and rigorous water-flushing protocols. But in 2007, the Baltimore school system gave up, choosing instead to provide all schools with bottled water. At \$675,000 per year, bottled water was cheaper than testing and remediation, officials said at the time.

"We took out and disabled every water fountain in the entire school system to make sure that we wouldn't have an issue," Keith Scroggins, the school system's facilities chief, said in an interview.

But cost wasn't the only issue, Scroggins said. There also was time -- and trust.

Switching to bottled water "saved us a tremendous amount of headache because obviously people were still concerned that if we had all these issues with the piping, how could they actually know that we were actually doing the testing right?" he said. "Their children were at stake here."

The school system promised to provide bottled water for all 190 of its buildings until those buildings could be renovated or replaced. Progress has been slow: Just six buildings have had the necessary upgrades to allow students to go back to filtered tap water. Now, Baltimore City Schools is hoping to rebuild or replace more than two dozen additional buildings over the next four years, Scroggins said.

Tainted drinking water not just in Newark schools

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Courier News, The

Newark Public Schools is not the only district in New Jersey that has been forced to shut off drinking fountains because of lead-contaminated water.

Twenty-one schools or daycares in New Jersey - five in South Jersey - tested above the U.S. Environmental Protection Agency's Safe Drinking Water standard for lead content from 2012 through 2015. Only Pennsylvania (37) and Maine (26) had more, according to a USA TODAY NETWORK analysis.

Another 13 schools in the state reported concentrations of lead above 10 ppb, a lower standard that the World Health Organization prefers.

Between 2013 and 2015, more than 200 schools reported lead test results to the New Jersey Department of Environmental Protection, according to water quality data from the DEP obtained by Gannett New Jersey. These schools all had their own water systems, unlike Newark schools, which draw from their city's system.

The effects of lead exposure, which can hinder the development of a growing child's body and mind, are irreversible. Even low levels of lead in the blood have been shown "to affect IQ, the ability to pay attention and academic achievement," according to the Centers for Disease Control.

But there is no testing regimen for most schools.

The EPA estimates that about 90,000 public schools and half a million child-care facilities are not regulated under the Safe Drinking Water Act because they rely on municipal utilities for water. Those utilities are required to test for lead but their attention isn't limited to school buildings.

Two weeks ago, Newark schools banned consumption of their own water, opting instead to substitute bottled water or water coolers in place of water fountains.

Tap water testing in that district revealed elevated lead levels in 30 school buildings. Officials cautioned parents not to be alarmed, but also announced plans to test 17,000 children for lead poisoning.

"If you have the opportunity to change the color paint in the school, you should be able to change the plumbing. There's a lot of stuff being redone in (her school)," Nicole Holland, a parent of two children in affected schools, told NJ.com.

Three Democrats, including New Jersey Senate President Stephen Sweeney, introduced a bill on Monday that would require all schools to test the quality of their water. The trio sent a letter to the state education commissioner asking that he compel schools to begin testing immediately.

In Atlantic County, Buena Regional High School and Collings Lake Elementary School both saw lead levels above the

EPA standard in 2014. Follow-up test results showed levels dropped into the acceptable range last year, district officials said.

Newcomb Middle School in Pemberton Township, Burlington County, and the Cumberland County Technical Education Center in Deerfield, Cumberland County also saw levels above the EPA standard.

At TLC Daycare Center in Washington Township, testing in 2013 showed lead levels at 26 ppb.

Conley Elementary, one of two schools in a rural Hunterdon County district, exceeded the EPA threshold five times from 2012 through 2014, including one sample that was more than 10 times the acceptable limit for lead.

"We shut down our water fountains and cafeteria sinks and went to bottled water for everything, including cooking," said Edward Keegan, chief administrator of the Bethlehem Township School District.

Initially, the school tried to address the source - degraded pipes - by adjusting the pH in the water to make the water less corrosive. Acidic water can take a toll on lead and copper pipes and fixtures, which remain common in older buildings..

That was only "partially effective," Keegan said, leading officials to decide to repipe the entire system out to the well serving the school at a cost of \$187,000 - a significant expense for a district with a total annual budget of \$9.1 million.

"Consequently, after many months of close monitoring, the level of lead in our water was too low to be detected by the lab and has continued to remain that way," Keegan said.

Under the proposed state legislation, \$3 million would be set aside to help all districts monitor the quality of their drinking water - not just those like Bethlehem Schools that are required to test their own systems.

"There's a regulatory black hole when it comes to schools and day-care centers," Yanna Lambrinidou, a Virginia Tech researcher who studies lead in water nationally, told USA Today. "In some ways, it's an official endorsement of exposure to lead and large-scale health harms that go undetected."

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TRACES OF TOXIC CHEMICAL IN WATER SUPPLIES

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Record & Herald News, The

A toxic chemical that recently raised concerns throughout the region when it was found near the Wanaque Reservoir has been detected in several smaller drinking water supplies that serve more than a dozen North Jersey towns.

Test results compiled by the federal government in the past three years show 1,4-dioxane, a probable carcinogen, in Fair Lawn, Garfield, Pompton Lakes and several other towns that rely heavily on wells. It has also been found in almost 80 other water systems in every part of the state, from Shore towns to Highlands communities.

Environmental officials say there is no imminent health threat from the levels of 1,4-dioxane that were detected, but there is still no clear consensus on how much of the chemical can be in drinking water before it makes anyone ill. The federal government has yet to develop a national standard for the chemical in water supplies. New Jersey does not yet have one. And the standards established in other states vary wildly.

Those whose drinking water has 1,4-dioxane are left with little information or guidance about whether it is dangerous.

"We need direction based on good science," said Ken Garrison, the borough engineer for Fair Lawn, which supplies water to 32,000 residents. "It's difficult for a water supplier to do anything without getting guidance from the regulators."

The findings in North Jersey range from a barely traceable amount in Park Ridge to a sample almost 30 times greater taken from some of Fair Lawn's wells that are in a Superfund site.

While the amounts of 1,4-dioxane found in North Jersey are incredibly small -- the highest recording of 3.24 micrograms per liter in Fair Lawn is equivalent to three drops of water in an Olympic-sized swimming pool -- they are important to regulators in setting baselines that determine how much exposure creates a health threat.

Unlike arsenic, PCBs and other dangerous substances that scientists have studied for decades, 1,4-dioxane belongs to a group of chemicals the Environmental Protection Agency classifies as an "unregulated contaminant" because the agency doesn't have enough data to determine all of its health implications and its prevalence in water supplies.

The chemical, 1,4-dioxane, is a clear, man-made substance used in paint strippers, degreasers and varnishes. It is also created unintentionally when mixing certain chemicals. It blends with water very easily and is difficult to remove.

Drinking 1,4-dioxane can cause liver and kidney damage and is "reasonably anticipated to be a human carcinogen" by the U.S. Department of Health. In 2010, the EPA determined that 1,4-dioxane is more likely to cause cancer than previously thought: Cancer could occur in one person out of 1 million exposed to 0.35 milligrams per liter of the chemical over a lifetime.

The chemical made news recently after it was discovered in groundwater at the Ringwood Superfund site in the Ramapo Mountains, where Ford Motor Co. dumped tons of paint sludge almost 50 years ago. Although that groundwater is in the watershed that supplies the Wanaque Reservoir, 1,4-dioxane has not been detected in the reservoir, which serves up to 3 million people.

But it has been found in water systems that serve Fair Lawn, Garfield, Pompton Lakes, Oakland, Ramsey, Park Ridge, Elmwood Park, Ridgewood, Wallington, Hawthorne, Mahwah and other towns that receive most of their water from wells, according to an analysis of EPA data by The Record.

The highest concentrations, by far, were found in Fair Lawn, which has been treating contaminated drinking water for almost 30 years. It was followed by Garfield, Pompton Lakes and Oakland. All were above the New Jersey standard to clean up groundwater: 0.4 micrograms per liter. But that standard applies only to contaminated site cleanups, not water systems.

While the towns have reported their findings of 1,4-dioxane to residents in annual water quality reports, there is nothing explaining what it means.

"It becomes a very difficult issue to communicate to the average consumer because there is so little data," said Kenan Ozekin, a senior researcher who has written about the chemical for the Water Research Foundation, a Denver-based non-profit.

Recently required test

The EPA just began requiring water systems across the nation to test for 1,4-dioxane and a new group of other unregulated chemicals.

The New Jersey Department of Environmental Protection plans to eventually develop a drinking water standard for 1,4-dioxane since it has been found in water supplies across the state. The highest level, 5.83 micrograms per liter, was found at a New Jersey American Water Co. plant that draws water from wells for parts of Warren County, according to EPA data.

But it's not yet a priority. The DEP's Drinking Water Quality Institute is focused on developing standards for two other dangerous chemicals that have been discovered in the state's drinking water: perfluorooctanoic acid, or PFOA, and perfluorooctane sulfonate, or PFOS, said Larry Hajna, a DEP spokesman.

"We will be reaching out to systems that have detected 1,4-dioxane in the near future with additional information," he said.

Without a national standard, other states have to develop their own.

California and Colorado have two of the strictest, with 1 microgram per liter and 3.2 micrograms per liter, respectively.

New York allows almost 16 times that at 50 micrograms per liter while South Carolina accepts up to 70 micrograms per liter.

"It's all over the place and that's what makes it difficult trying to get a sense of what the standard should be," said Garrison, a Fair Lawn resident.

To develop a standard, Ozekin said, more testing needs to occur. "One sample may not tell you the whole story," he said. "You need to come up with a monitoring plan."

Trying to get 1,4-dioxane out of water is difficult and expensive.

Tucson, Ariz., built an \$18 million treatment plant that uses a method called "advanced oxidation" in which ultraviolet light and hydrogen peroxide remove 1,4-dioxane and other contaminants. It opened in 2014 and purifies 8 million gallons a day.

The Tucson well system, like Fair Lawn's, is contaminated with the chemical trichloroethylene, a cancer-causing solvent known as TCE that is often found in wells polluted with 1,4-dioxane.

Tucson, like Fair Lawn, had blasted the water with air for almost three decades to remove TCE well before it reached any faucets. But Tucson found 1,4-dioxane in its drinking water as far back as 2002. While blending the contaminated water with fresh water helped lower the concentration, water officials didn't think it would fall far enough to meet updated EPA health standards.

"There was the sentiment that the city didn't respond well in the '80s, when we first found TCE in the water," said Fernando Molina, a spokesman for Tucson Water. "We wanted to stay ahead of 1,4-dioxane and make sure everyone knew this was important to us."

Fair Lawn is similar but on a much smaller scale.

The town has been removing harmful chemicals from drinking water for almost 30 years at a treatment plant. The water comes from the Westmoreland Well Field, one of the region's oldest Superfund sites. It is contaminated with solvents from Eastman Kodak, Fisher Scientific and Sandvik Inc. that leached into the water supply.

Much of the 1,4-dioxane stays in Fair Lawn's water even after air stripping, Garrison said. But the town is not prepared to make a major investment in new technology until environmental regulators develop a firm standard.

"Where we're going on this depends on what EPA or DEP comes up with," Garrison said. "We need to know what the numbers are."

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